Defense Science & Technology Seminar on Emerging Technologies

Carbon Nanotubes - Revolutionary Opportunities

Sponsored by the Deputy Under Secretary of Defense for Science & Technology and the Office of Naval Research

Friday, March 19, 1999

Crystal City Marriott (Crystal Forum)
1999 Jefferson Davis Highway
Arlington, VA 22202
Phone: (703) 413-5500 Reservations: (800) 228-9290

Agenda

0830	Welcome Introduction	Dr. Delores Etter, DUSD(S&T) Dr. Robert Trew, ODUSD(S&T) Dr. John Pazik, ONR
0840	Carbon Nanotubes: Promise for the Future	Dr. Richard Smalley, Nobel Laureate, Rice University
0910	Theoretical Predictions: Electrical and Mechanical Properties	Dr. Carter White, NRL
0930	The Road to the All Carbon Computer	Dr. Charles Lieber, Harvard
0950	Recent DoD MURI Results in Carbon Nanotube S&T	Dr. Richard Superfine, UNC-Chapel Hill
1010	Nanotubes: An Industrial Perspective	Dr. Wei Zhu, Lucent Technology
1030	Closing Comments/Adjournment	Dr. Delores Etter, DUSD(S&T)

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OFFICE OF THE DIRECTOR OF
DEFENSE RESEARCH AND ENGINEERING
WASHINGTON, DC 20301-3040

Dear Colleague:

We are pleased to invite your participation in the Defense Science and Technology Seminar on "Carbon Nanotubes: Revolutionary Opportunities," which is being co-sponsored by the Deputy Under Secretary of Defense for Science and Technology and the Office of Naval Research. The seminar will be held on Friday, March 19, at the Crystal City Marriott (Crystal Forum) , 1999 Jefferson Davis Highway, Arlington, Virginia. A copy of the agenda and other information relevant to registration and attendance at the seminar are attached.

The seminar is the fifth in a continuing series initiated in the fall of 1998 to promote dialogue among military leaders, members of the Defense science and technology community, and leading researchers from industry and academia on topics of growing interest and importance to the Department of Defense. They are held on a regular basis, usually on the second Friday of each month, from 8:30 to 10:30 AM. Each seminar features a number of short presentations by distinguished researchers in the field that are intended to provide useful insights in a technology area offering significant military payoffs.

The topic of Carbon Nanotubes was selected because of the rapid pace of developments in this field and the great potential that these advanced materials have to impact a variety of future military systems. Carbon nanotubes are a unique form of carbon with mechanical strengths predicted to rival that of steel but at significantly lower weight. In addition, they can be fabricated with a variety of electrical properties ranging from semiconducting to metallic. Potential military applications of these advanced materials include low-observable structures, field emission devices, and novel electronic systems.

We trust that you will find this seminar informative and productive. At the end of the seminar, please take advantage of the opportunity to suggest topics for future S&T seminars by filling out the comment sheet that will be provided. We hope to promote the development of novel approaches for addressing Defense needs and advanced military systems through better understanding of current operational and technological challenges. Your participation in the S&T seminars will help us to achieve our objective.

Sincerely,

Delores M. Etter
Deputy Under Secretary of Defense
(Science and Technology)

F. E. Saalfeld
Executive Director and
Technical Director, ONR

Attachments